

Operations

OPERATIONAL NEEDS, REQUIREMENTS, CONCEPTS, AND MODIFICATIONS

COMPLIANCE WITH THIS INSTRUCTION IS MANDATORY. This instruction implements AFPD 10-6 *Mission Needs and Operational Requirements*, and USSOCOM Directive 70-2. This instruction outlines responsibilities and procedures for the development and processing of AFSOC MNSs, ORDs, and modifications (AF Forms 1067). It also outlines responsibilities and procedures for reviewing other lead operating command requirements documents and identifying resulting AFSOC deficiencies/requirements. As the AFSOC spokesman for operational requirements, DOXR is responsible for developing and processing AFSOC requirements documents applying collectively or individually to the Combat Air Forces (i.e., ACC, PACAF, USAFE), AFSPC, AETC, AMC, and other agencies such as USSOCOM. This guidance applies to HQ AFSOC staff agencies and other organizations participating in AFSOC Council, RRB, and CRB proceedings. It also establishes procedures for tracking and updating actions and documents in the AFSOC Requirements Management System (ARMS) and the Integrated Requirements Support System (IRSS), both of which are managed by DOXR. This instruction does not apply to the Air National Guard (ANG) or the Air Force Reserve Command (AFRC).

This is the initial publication of AFSOCI 10-601. It seeks to consolidate several existing publications and streamline the procedures used in the development, processing, and staffing of Mission Needs Statement (MNS), Operational Requirements Documents (ORD), and AF Form 1067, Requirements Proposal. It incorporates the Modernization Planning Process, Requirements Process and the requirements-tracking databases. It defines the roles and responsibilities of AFSOC agencies. It describes the organization, functions, and responsibilities of the AFSOC Council, Requirements Review Board (RRB), and Configuration Review Board (CRB). This guidance applies to HQ AFSOC staff agencies and other organizations participating in AFSOC Council, RRB, and CRB proceedings.

This instruction incorporates SAF/AQ Acquisition Lightning Bolt Initiatives and other streamlining activities to better support Air Force acquisitions. It corrects deficiencies in the development, processing, and staffing of Mission Needs Statements (MNS), Operational Requirements Documents (ORD), and AF Forms 1067, Requirements Proposal. Additionally, this change aligns the instruction with AFI 10-601 and USSOCOM Directive 70-2.

Supersedes: AFSOCHOI 57-1, 1 Mar 92

OPR: HQ AFSOC/DOXR (Maj Edward M. Brolin)

Certified by: HQ AFSOC/DOX (Col David A. Schantz)

Pages: 39

Distribution: F

Page

1. AFSOC Requirements Generation Process.....	3
Figure 1. AFSOC Modernization Planning Process.....	3
2. AFSOC Participation in Other Lead Operating Command Requirements Processes.	4
3. AFSOC Requirements Definition and Program Management Responsibility	4

4. AFSOC Participation in Other Command/Air Force Requirements Definition.....	5
5. Requirements Documentation Overview.....	5
6. AFSOC Requirements Documents (AFSOC Lead).....	5
7. AFSOC Requirements Documentation Staffing, Coordination, Validation and Approval.....	11
Figure 2. Requirements Document Staffing/Coordination Process	13
8. Modification Process Overview	15
9. Requirements Documentation - Electronic Support Tools.....	15
10. Alternate Means of Satisfying Needs	17
11. Training and Acquisition Professional Development Program Certification Requirements	18

Attachments

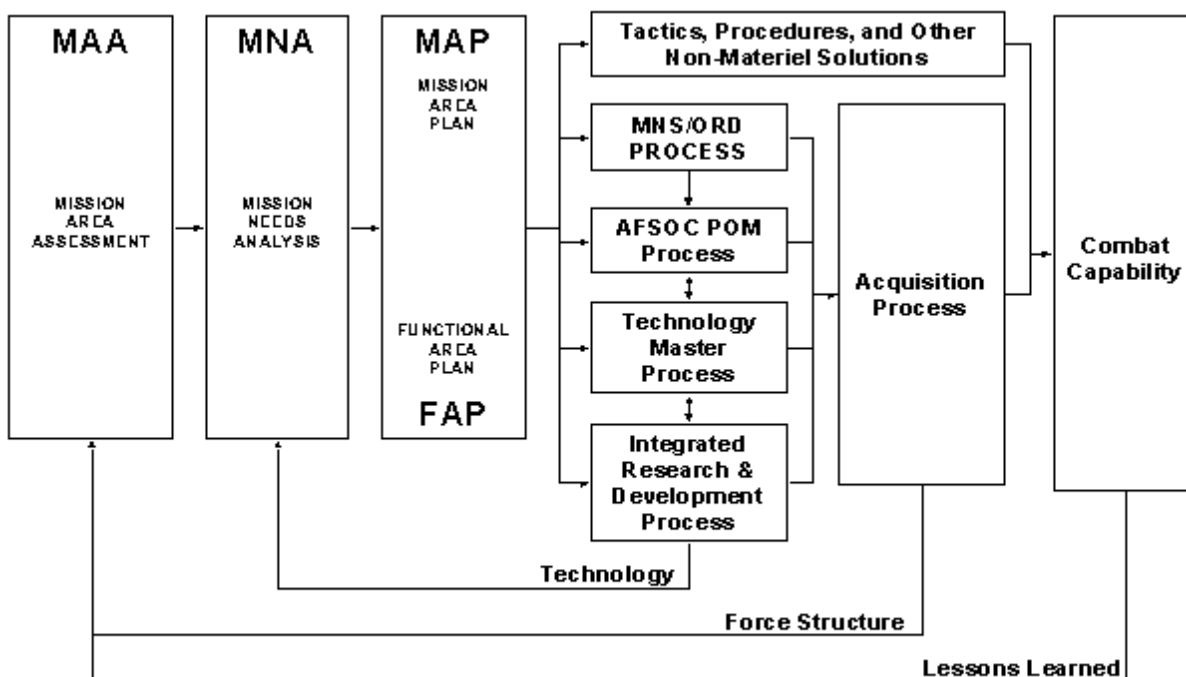
Page

1. Glossary of References, Abbreviations, and Acronyms.....	19
2. Requirements Document Staffing/Coordination Process	22
3. AFSOC Requirements Related Boards.....	22
4. MNS/ORD Checklists.....	32
5. Cover Sheet and Transmittal Letter	37

1. AFSOC Requirements Generation Process

AFSOC requirements can originate from a variety of sources. They are “top-down” directed by the Commander-in-Chief or the Secretary of Defense, mandated by Congress, or guided by Chairman directives or Joint Staff directive. However, the majority of AFSOC requirements are established within the command and result from the Modernization Planning Process (MPP), shown in **Figure 1**. The first phase of the MPP is the Mission Area Analysis (MAA). MAAs are conducted to identify mission tasks, using a “strategy to task” process which links the tasks for certain military capabilities to the military strategy provided by the CJCS. The Mission Needs Analysis (MNA) begins when tasks are identified during the MAA. The objective is to evaluate AFSOC’s ability to accomplish identified tasks and missions using current and programmed future systems. This process is called “task to need.” Mission Area Plans (MAPs) cover a period of 25 years and use the results of the MAA and MNA processes to identify weapon system modernization efforts and key technologies required to satisfy known needs. After considering all nonmaterial options, materiel solutions to deficiencies are assessed. If a materiel solution is warranted, the need (or significant technological opportunity) is defined in a Mission Need Statement (MNS). Unless a need has an approved MNS, it will not be considered for funding in the Planning, Programming, and Budgeting System (PPBS). If an operational need successfully competes for funds, a Program Management Directive (PMD) is issued. The PMD authorizes AFSOC to initiate concept exploration and provides specific guidance to all other affected agencies on their roles and responsibilities. A need then drives requirements that are expressed in terms of performance and support values that provide the operational capability to meet a mission need. These values are documented in the Operational Requirements Document (ORD), which forms the basis for contractual specifications.

Figure 1. AFSOC Modernization Planning Process.



1.1. Process Exceptions

Not all deficiencies result in the initiation of an acquisition program, and thus, enter the Requirements Process. The following types of programs do **not** require a MNS:

1.1.1. C4 mission needs with a projected program cost of less than \$15 million will use a C4 Systems Requirements Document (CSRD) as a MNS IAW AFI 33-103.

1.1.2. Safety of flight upgrades.

1.1.3. Low cost (below \$65 million FY96 constant dollars) upgrades generated by an AF Form 1067 (for Air Force funded programs only).

1.1.4. Basic (6.1), Exploratory (6.2), or Advanced Development (6.3) Research, Development, Test, and Evaluation (RDT&E) Programs. Contact SAF/AQX for information on these programs.

1.1.5. Advanced Concept Technology Demonstrations (ACTDs) that have been approved by the JROC and will lead directly to a residual capability for the warfighter and to ORD development.

1.1.6. Kenney Battlelab Initiatives that are approved by the AFROC and designed to improve an existing capability (for which there is a documented or implied need) or process.

1.1.7. Directed programs as described in Paragraph 1.

1.2. Process Documentation Support

The results of Modernization Planning are documented in Mission Area and Mission Support Plans, described in AFI 10-1401, Modernization Planning Documentation. The primary documentation for a potential acquisition program are the MNS, PMD, Analysis of Alternatives (AoA), ORD, and CRD (if appropriate), described briefly in this document and in more detail in AFI 10-601, Mission Needs and Operational Requirements Guidance and Procedures.

2. AFSOC Participation in Other Lead Operating Command Requirements Processes

As a Participating Command, AFSOC will provide representation in the Requirements and Modification Processes of other lead operating commands. This is accomplished through review of other MAJCOM requirements documents, AFSOC membership in the Combat Air Forces (CAF), and participation in other MAJCOM Research, Development, and Acquisition (RD&A) Processes. AFSOC/DOXR is the Command OPR for staffing requirement documents and providing AFSOC representation in other requirement processes. Identification of AFSOC deficiencies associated with a potential major defense system acquisition or modification begins during other lead operating commands' "comments phase" of the requirements coordination process. It is at this time potential AFSOC impact is first identified.

3. AFSOC Requirements Definition and Program Management Responsibility

The Director, Operations (AFSOC/DO) is responsible for developing and validating command requirements. The Chief of Operations, Plans, Tactics, Exercises, and Requirements (AFSOC/DOX) chairs the Requirements Review Board (RRB), and recommends priorities for allocating resources to the AFSOC/CC and CV for their approval. The Director, Plans and Programs (AFSOC/XP) is the OPR for Mission Area Plans (MAP), RoadMAP development, the Planning, Programming, and Budgeting System (PPBS) for the command (to include all aspects of Program Objective Memorandum (POM) development and submission and Major Force Program (MFP) 11 programming actions), and program management for fielding new systems and modifications to current ones. Requirements are generated from deficiencies

identified in the MAPs and RoadMAP. AFSOC/DOXR is the OPR for AFSOC operational requirements. AFSOC/SC is the OPR for AFSOC C4 plans, programs, requirements, architecture and procurement. AFSOC/LG is responsible for validating and tracking all aircraft and aircraft related modifications for assigned aircraft that are accomplished using the AF Form 1067 process (A discussion of the various modifications that can be done using an AF Form 1067 can be found in Appendix B). Regardless of responsibility for a particular project or program, the designated Project/Program Manager (PM) shall staff all impacts and requirements through the AFSOC Modernization Planning Process (MPP), so resultant mission deficiencies are documented in the appropriate Mission Area Plan (MAP).

3.1. AFSOC Requirements Review Board (AFSOC RRB)

The AFSOC RRB is chaired by AFSOC/DOX, and chartered to conduct a comprehensive review of AFSOC mission needs. The AFSOC RRB evaluates emerging requirements across all AFSOC MAPs, ensuring each proposed deficiency, solution, and permanent modification integrates into AFSOC long-range plans. New requirements are briefed to the RRB and are either approved for further development of a Mission Need Statement (MNS) or disapproved. Existing requirements (already approved) are reviewed and combined with new requirements in order to develop a rank ordered prioritized list without regard to future budget considerations. This prioritized list is then coordinated through the directors and forwarded to the Command Section for approval. The prioritized list is forwarded to the AFSOC PEG for funding consideration. A separate list containing only special operations-peculiar, validated requirements is forwarded to USSOCOM/SORR-SR for consolidation into the USSOCOM Integrated Requirements Priority List. A more detailed discussion of the RRB can be found in Attachment 2.

3.2. AFSOC Council

The AFSOC Council is a director-level council, chaired by AFSOC/CC. All mission needs, solutions, and acquisition programs will be reviewed and/or approved at an AFSOC Council meeting. AFSOC Council membership includes representatives from all AFSOC directorates. A more detailed description of the AFSOC Council can be found in Attachment 2.

4. AFSOC Participation in Other Command/Air Force Requirements Definition

DO is responsible for representing AFSOC in other MAJCOM requirements processes and HQ USAF/XO reviews. Through participation in other MAJCOM MPP and RD&A prioritization, AFMC's TPIPT actions and Technology Master Process (TMP), and HQ USAF/XO MPP and Long Range Planning efforts, AFSOC requirements impacts, issues, and priorities are corporately addressed. The PM will keep DOXR informed on the status of their requirements/programs through briefings to the AFSOC RRB and AFSOC Council, coordination of requirements documents, and notification to DOXR any time there is a critical requirement/program change.

5. Requirements Documentation Overview

The Requirements Process is uniform throughout the DoD. The process consists of four distinct activities: definition, documentation, validation, and approval. The Air Force uses the Modernization Planning Process to define needs and potential solutions. Documentation is accomplished through the MAP/MSP, MNS, PMD, AOA, ORD, and CRD (if appropriate). Validation is the formal review process, at the MAJCOM level, to confirm the need or operational requirement. Approval is the formal or official sanction of the identified need and/or operational capabilities at the Air Force or USSOCOM level.

6. AFSOC Requirements Documents (AFSOC Lead)

AFSOC/DOXR is the AFSOC focal point for developing and staffing requirements documents. This includes determining, documenting, coordinating, and reviewing all AFSOC requirements. When developing documents, a Total System Approach will be used to include both system capability and total

life-cycle support requirements. DOXR will submit requirements documents for validation and approval through the DoD process, document analyses and AoA activities, coordinate efforts with other commands and agencies, and brief requirements through Air Force and DoD acquisition reviews.

6.1. Mission Need Statements (MNS)

Any unit or agency may submit a proposal for a MNS, or it may be top-down directed. This proposal will be documented in the format prescribed in AFI 10-601 and USSOCOM Directive 70-2 and should address all the points highlighted in the MNS/ORD checklists (See Attachment 3). Any AFSOC organization may submit a proposal. DOXR will review the document for format and content and staff the proposal prior to the RRB to ensure linkage to the MAP.

6.1.1. Mission Needs are a Basis for Material Solutions. Mission needs may seek to establish a new operational capability, improve an existing capability, exploit an opportunity to reduce costs, or enhance performance. AFSOC organizations shall first try to satisfy mission needs through non-materiel solutions, such as changes in doctrine or tactics. If it is determined that the mission need can be sufficed by a modification to a system or program, refer to Section 4, Modification Process Overview.

6.1.2. Purpose of a MNS. In a MNS, Department of Defense (DoD) Components document deficiencies in current capabilities and opportunities to provide new capabilities expressed in broad operational terms. The MNS identifies and describes the mission deficiency; discusses the results of mission area analysis; describe why non-materiel changes (i.e., doctrine, tactics, etc.) are not adequate to correct the deficiency; identify potential materiel alternatives; and describe any key boundary conditions and operational environments that may impact satisfying the need. The MNS should succinctly state a mission deficiency or technological opportunity. It is non-system specific to allow selection of the most cost-effective solution; however, it may identify potential solutions and indicate a tentative preference.

6.1.3. MNS Format.

6.1.3.1. The MNS consists of six mandatory sections:

- Paragraph 1 - Defense Planning Guidance Element
- Paragraph 2 - Mission and Threat Analysis
- Paragraph 3 - Non Materiel Alternatives (Changes in Training/Doctrine/OPS)
- Paragraph 4 - Potential Materiel Alternatives
- Paragraph 5 - Constraints
- Paragraph 6 - Joint Potential Designation

6.1.3.2. See AFI 10-601 for more details on the MNS format. See also CJCSI 3170.01, Enclosure B, pages B-1 through B-2 and USSOCOM Directive 70-2.

6.1.4. Combat Mission Need Statement (C-MNS) Process. This is an expedited process for documenting and staffing urgent, time-sensitive Combat Mission Needs. It is the up-front portion of the Rapid Response Process (RRP) described in AFI 63-114. The C-MNS was used with great success during DESERT SHIELD, DESERT STORM, and JOINT ENDEAVOR. The RRP is used to satisfy deficiencies that arise during combat or crisis operations or when the AFSOC/CC believes accelerated peacetime acquisition procedures are necessary, based on immediacy of a need and availability of offset funding. The C-MNS should be used only for *urgent needs* and not as a process to circumvent or accelerate the normal requirements process. Format and procedures for completing a C-MNS are found in AFI 10-601 and in

CJCSI 3170.01. Appendix H of USSOCOM Directive 70-2 applies to C-MNS to be processed through USSOCOM. Regardless of the path taken to approve a C-MNS, DOXR will staff the document to both HQ USAF and USSOCOM (one for info, the other for action).

6.2. Analysis of Alternatives (AoA)

The AoA helps decision makers select the most cost-effective alternative to satisfy a mission need. It compares alternative solutions on the basis of operational and cost effectiveness, documents the analytical and operational rationale for choosing the preferred alternative, helps to justify the need for starting or continuing an acquisition program, and serves as an important tool for developing the ORD, the concept of operational employment, and the test and evaluation master plan (TEMP) for the preferred alternative. The majority of AoAs are performed during Phase 0 of the acquisition cycle. An AoA conducted during Phase 0 to meet Milestone I requirements is known as an AoA I. An AoA conducted during Phase I to meet Milestone II requirements is known as an AoA II. The AFMC Office of Aerospace Studies (AFMC/OAS) is the Air Force Center of Expertise (COE) for AoAs. The AoA COE supports MAJCOM study directors in helping administer, plan, execute, and facilitate reviews. OAS is responsible for the AF AoA training course and AoA handbook, which provide detailed information on how to accomplish an AoA. Electronic copies of the course, handbook, and an AoA template are available on the AFSOC Requirements Bulletin Board. For USSOCOM programs, the Special Operations Acquisition Executive (SOAE) determines whether or not an AoA needs to be accomplished and is the approval authority for the final product. Refer to AFI 10-601 and USSOCOM Directive 70-2 Appendix E for more detail regarding AoAs.

6.3. Operational Requirements Document (ORD)

The ORD is the *most critical* document in the requirements identification process. The initial ORD is prepared during Phase 0, Concept Exploration and Definition, following a successful Milestone 0 decision. The first ORD is the statement of AFSOC's requirements for the Milestone I decision. The ORD is solution oriented and will be based on the most promising alternative determined during the AoA studies accomplished during Phase 0 (if an AoA was accomplished). It documents how the system will be operated, deployed, employed, and supported. It also documents specific operationally oriented thresholds and objectives in terms of system-specific capabilities, characteristics, and other related operational variables. The ORD helps ensure the acquisition of military systems that meet AFSOC's needs in terms of intended mission and normal peacetime training requirements. Refer to AFI 10-601 and USSOCOM Directive 70-2 Attachment 4 for more detail.

6.3.1. Purpose of the Operational Requirements Document. The ORD provides a bridge that links the Mission Needs Statement (MNS) and CRD (if applicable) to the Acquisition Program Baseline (APB) and the contractual specifications. The initial ORD (ORD I) establishes objective values (broad, high-level performance parameters) and thresholds values (minimum acceptable operational requirements) by describing the system capabilities and characteristics of the proposed concepts. In some cases in the initial ORD, the concept is defined, but the specificity of the requirement has not been determined. These initial requirements can be expressed as "To Be Determined" or TBD. Thresholds and objectives in the ORD consider the results of the analysis of alternatives and the impact of affordability constraints. Because of this, the approved ORD precedes the Milestone decision (i.e. ORD I precedes Milestone I, etc.).

6.3.2. ORD Format.

6.3.2.1. There are seven mandatory areas that must be addressed in the ORD:

- Paragraph 1 - General Description of Operational Capability

- Paragraph 2 - Threat
- Paragraph 3 - Shortcomings of Existing Systems
- Paragraph 4 - Capabilities Required
- Paragraph 5 - Program Support
- Paragraph 6 - Force Structure
- Paragraph 7 - Schedule Considerations

6.3.2.2. The proposed ORD should be submitted in the format described in AFI 10-601 and USSOCOM Directive 70-2 Attachment 4, and should address all points highlighted in the MNS/ORD checklists found in Attachment 3 of this HOI.

6.3.3. Requirements Correlation Matrix (RCM).

The RCM is an executive summary of an Air Force ORD. It is used to display and track essential user needs and requirements as they evolve through cost-performance tradeoffs over the course of a program. It also provides the means for documenting the rationale for user-stated needs and requirements in the ORD. It is an Air Force only document attached to all Air Force ORDs. The RCM is not required for ORDs originating outside the Air Force or for SOF unique ORDs that will be approved through USSOCOM channels. The RCM is not a stand-alone document and must not introduce new or conflicting information not found in the ORD. See AFI 10-601 Attachment 7 for additional details on RCM purpose, procedures, and format.

6.3.3.1. Contents of an RCM.

The RCM contains system operational characteristics and capabilities quantified by thresholds and objectives as defined in the ORD. The operational characteristics and capabilities contained in the RCM serve as the foundation for developing the APB and the System Maturity Matrix (SMM), an implementing command management tool. The RCM has three parts.

6.3.3.1.1. RCM PART I—Include a tabular summary of the system parameters, included in the ORD text, expressed as thresholds and objectives that describe the user's operational, maintenance, and logistic requirements. All parameters that are key to the system success, (KPP) will be asterisked and included in the performance section of the APB.

6.3.3.1.2. RCM PART II – Explain in detail, how the threshold and objective values listed in Part I were derived. Cite specific studies, analysis, threat assessments, modeling, or other reference sources (including informed military judgments) that justify and substantiate the threshold values for each system characteristic or capability. Include any cost analysis information performed during the Phase 0 activities (AoA or concept studies) to derive CAIV objectives.

6.3.3.1.3. RCM PART III—Explains the rationale for changes to parameter threshold and objective values during ORD updates. ORD I will not have a Part III.

6.3.3.2. Use of the RCM.

As the program matures and needs evolve into firm thresholds (vice TBDs), columns in RCM, Part I, will reflect system-specific performance and support values agreed to by the using, implementing, and supporting commands. The value for each threshold must be referenced in Part II of the RCM as well as in the document, describing its relationship to mission success and how that value was derived. When a threshold changes from an earlier ORD iteration, give the rationale for the change in Part III of the RCM. All thresholds listed in the RCM must be documented in the ORD, and vice versa.

6.3.4. Changes to the ORD.

6.3.4.1. As a program matures, changes to the ORD may be necessary. This can be accomplished in several ways:

6.3.4.1.1. **ORD Update** – During the normal course of the program, prior to a Milestone Decision, the ORD is updated.

6.3.4.1.2. **ORD Revision** – Between Milestones, a revision to the ORD is appropriate if it becomes necessary to refine or clarify a threshold in order that the program continue. HQ USAF/XOR will review all revisions and determine the level of approval authority required for the revision.

6.3.4.1.3. **ORD Annex** – When an increase in capability is added to a system, it may become necessary to “annex” the ORD. For example, should a new system or capability be added to an aircraft and the aircraft takes on a new mission, an annex to that aircraft ORD is required. It is not necessary to rewrite the original aircraft ORD. The original ORD will accompany the annex and the annex will reference the paragraph in the “parent” ORD.

6.3.5. Thresholds, Objectives and Key Performance Parameters. A **threshold** is a minimum acceptable operational value for a system capability or characteristic that, in the user's judgment, is necessary to provide an operational capability that will satisfy the mission need. Values short of a threshold call into question the utility of the system; i.e., the concept or system selection is reevaluated or the program is reassessed or terminated. Values beyond the threshold that could potentially have a measurable increase in performance are called **objectives**. A limited number of parameters should be designated as Key Performance Parameters (KPPs). These KPPs have thresholds that are deemed so significant that failure to meet the threshold is cause for the concept or system selection to be reevaluated or the program to be reassessed or terminated. KPPs are extracted from the ORD and included in the Acquisition Program Baseline (APB) at each milestone. In an effort to implement CAIV directives, it is important to identify **both** threshold and objective values to provide the trade space necessary for the program manager to acquire the “best value” system for the warfighter. Additional guidance is available in AFI 10-601, CJCSI 3170.01, and DoD 5000.2-R.

6.3.6. Short Method to Acquire Ready or Replacement Technologies (SMART) ORD. The SMART program is an abbreviated method using a shortened ORD format for certain ACAT III requirements. The SMART process should be used for items such as ACTDs (that have successfully demonstrated a proven capability), Kenney Battlelab initiatives, ACAT III requirements that support other operational MDAPs, COTS, NDI, or technologically advanced solutions which are readily fieldable with reduced RDT&E effort. HQ USAF/XOR recommends this shortened ORD format for the user as a common sense approach to streamlining the requirements documentation process. Through this process, the AF is taking advantage of DoD 5000.2-R flexibility allowed for tailoring documentation. DOXR shall forward the SMART ORD to HQ USAF/XOR attached to a transmittal memorandum identifying the intended source of funds. Simplifying this document by succinctly addressing the requirement plus identifying the source of funding up front should help shorten the overall requirements generation and validation process.

6.3.6.1. The SMART process is appropriate for mature solutions to ACAT III requirements that are fully funded and can be acquired and quickly fielded. In some cases, this capability can be stated in a well-defined Operational Concept of Employment, the number of systems needed to support that concept, and an

RCM defining parameters. It is not appropriate for a requirement requiring extensive RDT&E, having multiple options that are being evaluated for potential solutions, or whose complexity will drive normal progression through all acquisition phases. This process is similar to an ORD I/II/III accelerated requirement designed to proceed directly to MS III. Examples of requirements eligible for SMART are:

6.3.6.1.1. Replacements for existing or support systems. In some cases, these may be minor programs procured initially to support ACAT I systems without a formal ORD or SORD accomplished.

6.3.6.1.2. Approved ACTD or Battlelab initiatives that have successfully demonstrated their capability and have well-defined operational and maintenance concepts.

6.3.6.1.3. Minor acquisition programs defined by DoD 5000.2-R as ACAT III programs or those support systems for existing weapon systems.

6.3.6.1.4. Non-Developmental Item (NDI) or Commercial Off the Shelf (COTS) systems which will require minimal testing and have proven operationally capable.

6.3.6.1.5. AFSOC is willing to provide the necessary funds to support the program until the next POM and will sponsor the program in their next POM submittal. (By identifying the funding source of programs that are ready to be fielded, the SMART program enables MAJCOMS to field rapidly advancing, innovative, successful and proven technologies to the warfighter and the staffing process will accelerate).

6.3.6.2. When a program has the potential of being fielded quickly, it should be easy to succinctly address the necessary information in the SMART ORD format. Using the SMART process, briefly address the areas in the traditional ORD format, but focuses on those items in order to arrive at the desired solution. Expand on each specific area (threshold and objective) in the RCM. It is desired, although not mandated, that the following areas be described in 5 to 10 pages, with no limit on RCM Part I and Part II. Further guidance on the format for a SMART ORD can be found in AFI 10-601.

6.4. Capstone Requirements Document (CRD)

Some mission needs are so broad that a *single* system is not capable of fulfilling them. Instead, the needs may necessitate the development of a “family of systems” or a “system of systems.” Thus, the CRD is referred to as an “umbrella document” linking the MNS to a series of ORDs that expresses the requirements for the family of systems to interoperate effectively and efficiently to accomplish the overall mission. In these cases, the user may choose to author a single (CRD) to state the required top level capabilities that ensure interoperability across the collection of systems. See CJCSI 3170.01 for specific guidance on the format of the CRD.

6.4.1. Purpose of a Capstone Requirements Document (CRD). A CRD is appropriate when the mission area requires more than one ORD, especially when the systems are developed by more than one service. The CRD serves as a guide for future ORD development and a vehicle for program oversight. When a CRD is appropriate, the Joint Requirements Oversight Council (JROC) will identify the lead agency to best represent overarching requirements for a “family of systems”. The approved CRD documents the user’s operational requirements for such a family of systems. It is also useful for documenting the high-level requirements when there are multiple users, perhaps in different MAJCOMs or Services. The requirements for the individual systems should support the CRD requirements and must be documented in a separate ORD for each system. The CRD is not normally appropriate or adequate to support the acquisition process, but is useful for describing the higher level requirements for a family of systems.

6.4.2. When a CRD is necessary. The ORD and the CRD differ mainly in their scope and perspective. An ORD documents specific operationally-oriented performance parameter thresholds and objectives in terms of system-specific capabilities to support an acquisition program while the CRD documents operationally-oriented thresholds and objectives in terms of the top-level capabilities for the family of systems and is a reference document linking the MNS to a family of ORDs. The top-level nature of the CRD means that it normally addresses Commander in Chief (CINC) or multi-service needs. The requirements in the CRD represent the total capability and interoperability for multiple systems. Because of this, the CRD provides a forum for performing tradeoffs and allocating requirements between systems in order to meet the top-level requirements with the most affordable combination of systems.

7. AFSOC Requirements Documentation Staffing, Coordination, Validation, and Approval

Electronic transmission is the preferred routing procedure for obtaining comment and coordination on unclassified packages. DOXR will also record requirements status and store electronic documents in the AFSOC Requirements Management System (ARMS) and the Integrated Requirements Support System (IRSS). The staffing/coordination process is shown in **Figure 2**. While the figure uses a MNS as an example, the process is identical for ORDs or CRDs.

7.1. Draft Development and Review Phase.

This phase consists of draft development and AFSOC review. A new requirement is submitted to DOXR as a MNS, started through command coordination, and is briefed to the RRB after completing two letter coordination. The coordination process allows mission and support directorate representatives to resolve issues during draft development. The review requires AFSOC directors and their staffs to provide critical, substantive, and administrative comments on the draft document and to concur with the basic need articulated in the MNS, the operations and maintenance concepts described in the CONOPS, analysis results of the AoA/other study, or the solution described in the ORD. When conflicting comments are received from the directorates, DOXR will work with the reviewers to resolve the issues.

7.2. Review and Comment Phase.

This phase begins when DOXR distributes the HQ AFSOC coordinated draft (unsigned) for comments to other Air Force agencies, USSOCOM, and the Special Operations Component Commands. In addition, DOXR will determine additional stakeholders in the potential program, such as other DoD agencies and services. HQ USAF/XOR is the focal point for coordination efforts with the Air Staff and Secretary of the Air Force (SAF) offices, and for harmonizing Air Force and other services requirements documents. USSOCOM/SORR-SR is responsible for coordinating SOF specific requirements with the Component Commands. This review allows action officers to recommend concurrence or provide critical, substantive, and administrative comments on the AFSOC draft document. This phase ends when comments obtained are consolidated by the action addressees and forwarded to DOXR for resolution.

7.3. Comment Resolution Phase.

This phase begins upon receipt of all comments. DOXR will reconcile all critical and substantive comments. Failure to address critical comments may be cause for nonoccurrence on the final document. DOXR will update the document to include relevant inputs and maintain a record of the disposition of each critical and substantive comment. As a minimum, the disposition document will record paragraph number; recommending office; the recommended change; and provide a brief rationale explaining why the change was rejected or partially incorporated. If the comments substantively change the "for comment" draft, it may be necessary to re-circulate the draft to selected addressees. This phase ends when all comments are satisfactorily resolved.

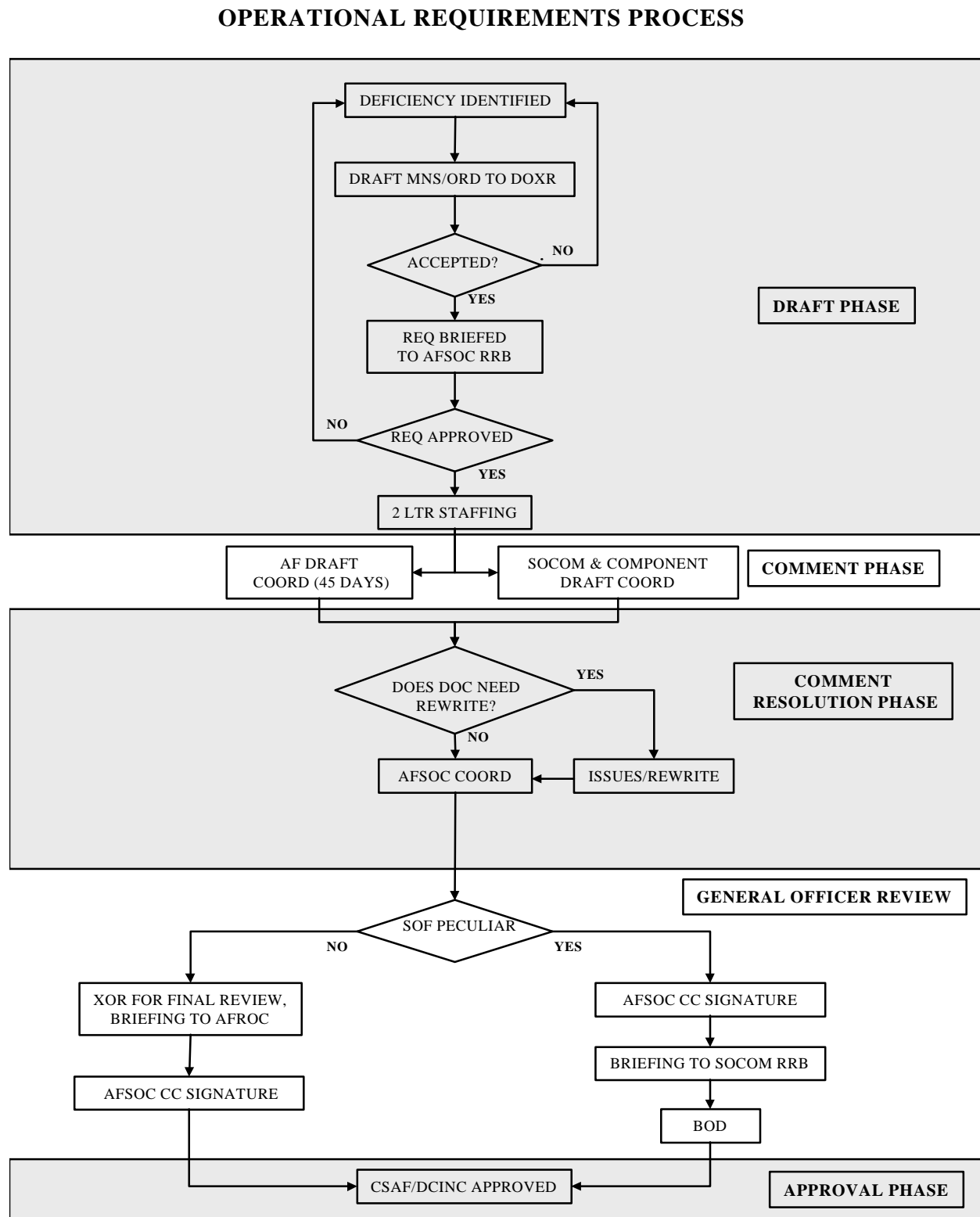
7.4. General Officer Review Phase.

For Air Force requirements, this phase begins when DOXR forwards the coordinated draft, unsigned cover sheet and transmittal letter to HQ USAF/XOR for final staffing through HQ USAF. Also during this phase, the requirement will be briefed to Air Force Requirements Oversight Council (AFROC) for concurrence. In addition, the Joint Requirements Oversight Council (JROC) will review and validate all requirements of potential ACAT I programs with joint applicability. HQ USAF/XOR determines when requirements briefings to the JROC are necessary. For SOF specific requirements, the document with signed cover sheet and transmittal letter is sent to USSOCOM/SORR-SR for review and presentation to the SOCOM RRB. A courtesy copy is also provided to HQ USAF/XORPD. This phase ends upon notification from HQ USAF/XOR that the document is ready for CSAF approval or from USSOCOM that the document has been approved by the RRB and is ready for DCINC approval. Examples of the required cover sheet and transmittal letter can be found in Attachment 4. In addition, further guidance regarding the content of the transmittal letter can be found in AFI 10-601 and USSOCOM Directive 70-2.

7.5. Approval Phase.

This phase begins upon notification that a final document is ready for CSAF or DCINC approval. DOXR will then forward the final document (with signed cover sheet) to USAF/XOR to submit for CSAF approval (for Air Force requirements), or to USSOCOM/SORR-SR to submit to the DCINC for approval (SOF peculiar requirements). This phase ends when the final CSAF or DCINC-approved document is distributed.

Figure 2. Requirements Document Staffing/Coordination Process.



7.6. AFSOC Staffing of Other Command/Air Force Requirements Documents

DOXR is responsible for receipt, AFSOC staffing and coordination, and filing of other MAJCOM and Air Force requirements documents. This includes MNSs, CONOPSs, PMDs, AOAs or other studies, ORDs, and CRDs. When DOXR receives documents originating from other activities, it will distribute the document to the appropriate AFSOC directorates for comment/review, consolidate comments, and submit an AFSOC response (via electronic coordination whenever possible). DOXR will also record requirement status, indicate if there is AFSOC impact and identify an AFSOC POC, and store electronic documents in the AFSOC Requirements Management System (ARMS) and the Integrated Requirements Support System (IRSS) Databases. Record copies of classified documents will be maintained within DOXR in electronic format on a secure computer or in paper format in an approved safe. DOXR will maintain a record of all critical and substantive comments. At a minimum, this record will identify paragraph number, recommending office, the recommended change, and provide a brief rationale explaining why the recommendation was rejected or forwarded to the lead operating command. It is also during this staffing process that potential AFSOC deficiencies are identified.

7.6.1. Comment Phase Activities. During review of pre-milestone 0 and 1 documents, directorates will identify potential AFSOC impacts to DOXR. If such an impact is identified, the affected directorate will designate a POC. Once a PM is formally designated by the AFSOC Council and an IPT is chartered, the PM is responsible for representing AFSOC in working with the lead operating command/agency and AFMC to further refine AFSOC requirements. During post-milestone 1 reviews, the PM will ensure AFSOC requirements and responsibilities are accurately defined in updated requirements documents. The PM will brief the status of AFSOC requirements associated with other lead operating command programs at the AFSOC RRB and AFSOC Council.

7.6.2. Coordination Phase Activities. Upon receipt of a final draft requirements document for coordination, DOXR will review the “for comment” history and determine if AFSOC concerns were addressed. If there is no AFSOC impact and all critical comments were reconciled, DOXR will return electronic concurrence to the originator and provide courtesy copies to AFSOC offices that provided comments during the original “for comment” phase. If all critical comments were not reconciled, DOXR will staff the document with all “for comment” coordinating offices, requesting recommendations on AFSOC coordination. DOXR will review and consolidate the comments, then return electronic concurrence/nonoccurrence to the originator. DOXR will represent AFSOC’s position during CAF meetings, other lead operating command Research, Development & Acquisition (RD&A) processes, and the AFROC. If there is an AFSOC impact associated with the requirement, DOXR will ensure all AFSOC requirements and responsibilities are accurately defined, and make a concurrence recommendation to CC/CV. Upon CC/CV action, DOXR will return electronic concurrence/nonoccurrence to the originator and will update the AFSOC Requirements Databases.

7.6.3. Co-sponsorship of Multi-Agency Requirements. When other commands or agencies (e.g., NASA, National Laboratory or Research Center) request AFSOC to co-sponsor a requirement, the designated PM will provide a coordinated AFSOC response to the request. The designated lead operating command will accomplish Air Force and Air Staff coordination. DO will co-sign draft document coversheets, and CC/CV will co-sign final document coversheets of multi-command requirements documents. Normally, AFSOC will co-sponsor a requirement only if it intends to fund the AFSOC portion of the effort and rank the program on the AFSOC RD&A list.

7.7. Combat Air Forces (CAF) Participation

By multi-command agreement, ACC is the advocate and spokesman for requirements common to CAF commands (ACC, PACAF, USAFE, AFSPC, and AFSOC). This ensures each requirement document,

modification proposal, research proposal, and associated RD&A priority list is presented as a single consolidated multi-command position. Based on AFSOC membership, ACC is the advocate for systems and programs that AFSOC operates but for which ACC is the lead operating command. DOXR represents AFSOC at the CAF Review Board. AFI 10-601 and the Multi-Command Agreement, Processing Combat Air Forces (CAF) Requirements Documents; Research, Development and Acquisition (RD&A) Programs; and Modification Programs, describe CAF procedures.

7.8. Air Force Requirements Oversight Council (AFROC) Participation

As the AFSOC OPR for requirements and acquisition processes, DOX is the AFROC AFSOC Requirements Principle. DOX supports CC in finalizing draft documents prior to the AFROC, preparing briefings, updating and gathering background data, and identifying AFSOC policy and process concerns. AFI 10-601 and the AFROC Charter describe AFROC procedures.

7.9. Joint Requirements Oversight Council (JROC) Participation

HQ USAF/XO, the Air Force JROC representative, determines which organizations will brief Air Force programs. DOXR assists in preparing briefings, gathering background documents, and supporting CC when a requirement/program for which AFSOC is lead, is reviewed. AFI 10-601 and JROCM-050-92, JROC Administrative Instruction, describe JROC procedures.

7.10. AFSOC Staffing of Other Service Requirements Documents (Service Harmonization)

The purpose of service harmonization is to assess the joint applicability of other Services' requirements to the needs of the Air Force. A Joint Potential Designator (JPD) is used to describe the level of joint DoD component involvement. JPDs are expressed as: Independent—no potential for systems interface or for joint development or procurement; Joint Interest—a potential for systems interface or impact to doctrinal procedures exists; or Joint—a MAJCOM wants joint program management, funding, development and/or procurement. DOXR will distribute these MNS/ORD/CRDs to the appropriate directorates within the Headquarters for review and request recommendations for a Joint Potential Designator. If a directorate recommends a JPD of Joint or Joint Interest, they will be required to identify a POC that will be involved in the program.

8. Modification Process Overview

The Modification Process supports all modifications, safety of flight upgrades, and low cost upgrades. A modification (Mod) is a change to a system (whether for safety, to correct a deficiency, or to improve performance) that is still being produced. An upgrade is a change to a system that is out of production. The upgrade process is used to correct deficiencies, provide new or improved capabilities for existing weapon and support systems, or remove capabilities when no longer needed. Mods are part of the milestone decision process of the system under production, and may require an ORD. Upon approval, the MDA determines which phase the Mod program will enter. Permanent upgrades are managed as acquisition programs—they enter the Requirements Process and require a MNS. The only exceptions to this are permanent upgrades involving safety of flight and those with an estimated cost below \$65 million. Details on the Modification and CRB process can be found in Attachment 2.

9. Requirements Documentation—Electronic Support Tools

The integration of electronic support tools into the Requirements Process serves to educate participants in the defense requirements/acquisition processes and facilitate the development and coordination of documents. HQ USAF/XO and MAJCOMs have an electronic requirements support system, which provides a means to receive, distribute, coordinate and approve documents throughout the Air Force. IRSS is a new automated system that is used throughout the Air Force requirements community. Prior to its development, ARMS was AFSOC's unique version of an electronic requirements support system. As

IRSS becomes fully operational, the use of ARMS will be gradually phased out. As the OPR for requirements, DOXR provides assistance in accessing electronic support tools.

9.1. Integrated Requirements Support System (IRSS)

The IRSS is an automated system that serves as a repository of documents in electronic format and supports the Air Force requirements generation process. It provides all participants access to AFSOC and Air Force requirements documentation and assists Program Managers (PMs) in tracking and staffing requirements. This electronic support tool is a database that tracks documents and documents' status. The primary objectives of IRSS include insight into other MAJCOM requirements, generation and coordination of requirements documents within and between MAJCOMs, showing linkage of requirements documents to deficiencies, and providing senior leadership, action officers, participants or users access to top-level requirement/program information. The IRSS is the standard USAF requirements generation and tracking software tool, and is in use by all USAF MAJCOMs.

9.1.1. IRSS System. The IRSS is located on the IRSS server, accessible to all AFSOC personnel with appropriate hardware and software. DOXR is the IRSS manager, and provides users with system information and access. The IRSS contains AFSOC and other MAJCOM requirement/program information such as points of contact, links or references to MAP deficiencies and Air Force documentation, financial data, and requirement/program history. Each action officer is responsible for updating status, identifying POCs, and inputting document text for assigned projects/programs. In addition, the IRSS acts as a library of Air Force requirements documents (e.g., MNSs, ORDs, PMDs,), plans and documents (e.g. MAPs, Long Range Plans), and standardized reports. A toolbox of software tools is available for PM use in managing assigned projects/programs, as well as an IRSS Tour Manual for users. DOXR is responsible for maintaining the requirements library and toolbox. System orientation for new IRSS users is also available through DOXR.

9.1.2. IRSS Operation. The IRSS is the primary tool of the action officer for defining requirements, drafting requirements documents, coordinating those documents and resolving comments, tracking program status, and accessing information about AFSOC and USAF requirements. The IRSS is also the primary tool of directors, commanders, and others with requirements/acquisition oversight responsibilities. These users will have access to requirement/program status, the requirements documents, and will be able to view and print standardized reports. Finally, because of its inherent usefulness and flexibility, IRSS could be modified in the future to support other functions within the staffing process.

9.2. AFSOC Requirements Management System

The AFSOC Requirements Management System (ARMS) is an automated system that serves as a repository of documents in electronic format and supports AFSOC's requirements generation process. It provides all participants access to Air Force requirements documentation and assists PMs in tracking and staffing requirements. This electronic support tool includes a database that tracks document status and links to electronic copies of documents. The primary objectives of the ARMS include providing senior leadership, action officers, participants or users access to top-level requirement/program information. ARMS is considered to be a legacy system and will eventually be phased out of use as IRSS becomes fully operational.

9.2.1. ARMS System. The ARMS is located on the DO server, accessible to all AFSOC personnel with appropriate hardware and software. DOXR is the ARMS database manager, and provides users with system information and access. The ARMS contains AFSOC requirement/program information such as points of contact, links or references to MAP deficiencies and Air Force documentation, financial data, and requirement/program history. Each action officer is responsible for updating status, identifying POCs, and

inputting document files for assigned projects/programs. In addition, the ARMS contains a library of Air Force requirements documents (e.g., MNSs, ORDs, PMDs,), AFSOC plans and documents (e.g. MAPs, Long Range Plans), and standardized reports. There is also a toolbox of software tools available for PM use in managing assigned projects/programs. An ARMS Operating Manual and software manuals are also available for users. DOXR is responsible for maintaining the requirements library and toolbox.

9.2.2. ARMS Operation. Prior to the implementation of IRSS, the ARMS was the primary tool of the action officer for defining requirements, tracking program status, and accessing information about Air Force requirements. PMs have read and write capability and access to toolbox software within the ARMS. The ARMS can also be accessed by directors, commanders, and others with requirements/acquisition oversight responsibilities. These users have read-only access to requirement/program status, access to the library, and the ability to print standardized reports.

10. Alternate Means of Satisfying Needs

10.1. Advanced Technology Demonstrations (ATD)

The purpose of the Advanced Technology Demonstration (ATD) program is to identify promising laboratory technologies that have the potential to address weapon system or infrastructure needs. Weapon system needs must be linked to a MAJCOM deficiency identified in their Mission Area Plans (MAPs). The ATD has a duration of less than four years and costs between \$2M-\$100M. These laboratory projects must have the specific objective of meeting the users' defined needs through risk reducing "proof of principle" demonstrations conducted at the subsystem or higher level in an operationally realistic environment. AFSOC/XPQ is the POC for identifying ATDs for the command.

10.2. Advanced Concept Technology Demonstrations (ACTD)

Advanced Concept Technology Demonstrations (ACTDs) exploit mature advanced technologies to solve important military problems. There are several key criteria against which ACTD candidates are evaluated: response to user needs, maturity of technologies, and potential effectiveness. ACTDs must address critical military needs. To evaluate proposed solutions, intense user involvement is required. ACTDs place mature technologies in the hands of the user and then conduct realistic and extensive military exercises to provide the user an opportunity to evaluate utility and gain experience with the capability. By limiting consideration to mature technology, the ACTD avoids the time and risks associated with technology development, concentrating instead on integration and demonstration activities. Finally, the potential effectiveness must be sufficient to warrant consideration of an ACTD. A key goal of ACTDs is to move into the appropriate phase of formal acquisition without loss of momentum, assuming the user provides a positive evaluation of the capability. An additional goal is to allow the user to retain possession of the test articles, providing a residual capability to further refine CONOPS and to permit continued use prior to formal acquisition. AFSOC/XPQ is the point of contact for identifying and managing potential ACTD candidates for the command.

10.3. Foreign Comparative Testing (FCT)

The FCT Program is a congressionally mandated program that provides dollars to the DoD to test and evaluate foreign non-developmental defense equipment to determine whether these items satisfy military requirements or correct mission area shortcomings. Foreign non-developmental items offer cost-effective alternatives to new, and perhaps unnecessary, U.S. developmental efforts and reduce the time to field equipment needed by the warfighter. FCT projects are nominated annually by USSOCOM and the Services to the Office of the Secretary of Defense. AFSOC/XPQ chairs the AFSOC FCT IPT that is responsible for identifying potential candidate systems and managing the test and evaluation effort.

11. Training and Acquisition Professional Development Program (APDP) Certification Requirements.

AFSOC personnel who participate in the Requirements Generation Process and Acquisition Management System shall be proficient in the acquisition process. AFSOC organizations that have a requirements and/or acquisition mission should identify those military and civilian positions that include at least 50% acquisition duties, in accordance with DoDD 5000.52. Those acquisition position categories that generally apply to requirements/program management functions at an operational MAJCOM are: program management, communications-computer systems, acquisition logistics, and test and evaluation. This identification allows incumbents of the positions to participate in the Acquisition Professional Development Program (APDP), a career development program that applies to officers, enlisted, and civilian personnel performing acquisition duties. To ensure proficiency, incumbents of acquisition positions must meet mandatory education, training, and experience requirements. At a minimum, personnel who generate requirements and/or manage acquisition programs will attend a basic acquisition management course (e.g., ACQ 101, Fundamentals of Systems Acquisition Management) and a course on the requirements generation system (e.g., SYS 111, Operational Requirements Process). Other training and education may be necessary, depending on position coding and APDP certification the individual may wish to pursue. An individual is expected to meet the acquisition position requirements within 18 months of assignment. More detailed information regarding APDP and training requirements can be provided by DOXR.

STEPHEN R. CONNELLY, Colonel, USAF
Director of Operations

Attachment 1

GLOSSARY OF REFERENCES, ABBREVIATIONS, AND ACRONYMS

References

DoDD 5000.1, *Defense Acquisition*
 DoDD 5000.2-R, *Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs*
 DoDD 5000.52, *Defense Acquisition Education, Training, and Career Development Program*
 DoDI 5000.58, *Defense Acquisition Workforce*
 DoDD 5000.59, *DoD Modeling and Simulation Management*
 DoDD 8000.1, *Defense Information Management (IM) Program*
 CJCS 3170.01 (Formerly Memorandum of Policy No. 77), *Requirements Generation System Policies and Procedures*
 AFPD 10-6, *Mission Needs and Operational Requirements*
 AFI 10-601, *Mission Needs and Operational Requirements Guidance and Procedures*
 AFI 10-602, *Determining Logistics Support and Readiness Requirements*
 AFPD 10-9, *Lead Operating Command Weapon Systems Management*
 AFPD 10-14, *Modernization Planning*
 AFI 10-1401, *Modernization Planning Documentation*
 AFI 21-101, *Maintenance Management of Aircraft*
 AFPD 33-1, *Command, Control, Communications, and Computer (C4) Systems*
 AFI 33-103, *Requirements Development and Processing (C4 Systems)*
 AFMAN 36-2234, *Instructional System Development*
 AFH 36-2235, *Information for Designers of Instructional Systems (Vol 3, Application to Acquisition; Vol 6, Guide to Needs Assessment; Vol 7, Design Guide for Device-Based Aircrew Training)*
 AFPAM 36-2211, *Guide for Management of Air Force Training Systems*
 AFPD 63-1, *Acquisition System*
 AFI 63-101, *Acquisition System*
 AFI 63-107, *Integrated Weapon Systems Management Program Planning and Assessment*
 AFI 63-114, *Rapid Response Process*
 AFHOI 800-2, *Policy and Guidance for Preparing Program Management Directives*
 Multi-Command Agreement, *Processing Combat Air Forces (CAF) Requirements Documents; Research, Development and Acquisition (RD&A) Programs; and Modification Programs*
 AFSOCHOI 10-6, *Programming and Budgeting Decision Structure*
 USSOCOM Directive 70-2, *Requirements Generation System*

Abbreviations and Acronyms

ACAT	Acquisition Category
ACC	Air Combat Command
ACTD	Advanced Concept Technology Demonstration
AETC	Air, Education, and Training Command
AFSOC	Air Force Special Operations Command
AFSOCROC	AFSOC Requirements Oversight Committee
AFMC	Air Force Materiel Command
AFROC	Air Force Requirements Oversight Council
AFSAA	Air Force Studies and Analysis Agency

AFSPC	Air Force Space Command
AMC	Air Mobility Command
APB	Acquisition Program Baseline
APDP	Acquisition Professional Development Program
AoA	Analysis of Alternatives
ARMS	AFSOC Requirements Management System
ASC	Aeronautical Systems Center
ATD	Advanced Technology Demonstration
BRG	Budget Review Group
C4	Command, Control, Communications and Computer Systems
CAF	Combat Air Force
CAG	Commander's Action Group
CINC	Commander-in-Chief
CJCS	Chairman of the Joint Chiefs of Staff
CONOPS	Concept of Operations
COTS	Commercial Off the Shelf
CRD	Capstone Requirements Document
CSAF	Chief of Staff of the Air Force
CSRD	Communications/Computer Systems Requirements Document
DAB	Defense Acquisition Board
DoD	Department of Defense
EMAT	Executive Mission Area Team
FCT	Foreign Comparative Testing
FY	Fiscal Year
KPP	Key Performance Parameter
IPPD	Integrated Process and Product Development
IPT	Integrated Product Team
IRSS	Integrated Requirements Support System
ISD	Instructional Systems Development
JPD	Joint Potential Designator
JROC	Joint Requirements Oversight Council
MAA	Mission Area Assessment
MAIS	Major Automated Information System
MAJCOM	Major Command
MAP	Mission Area Plan
MAT	Mission Area Team
MDA	Milestone Decision Authority
MDAP	Major Defense Acquisition Program
MNA	Mission Needs Analysis
MNS	Mission Need Statement
MPP	Modernization Planning Process
MSA	Mission Solution Analysis
MSP	Mission Support Plan
NASA	National Aeronautical and Space Administration
NDI	Non-Developmental Item
OPR	Office of Primary Responsibility
ORD	Operational Requirements Document
PACAF	Pacific Air Force
PEG	Program Evaluation Group

PM	Project Manager (pre-milestone 1), Program Manager (post-milestone 1)
PMD	Program Management Directive
POM	Program Objective Memorandum
PPBS	Planning, Programming, and Budgeting System
RAPR	Requirements and Acquisition Program Review
RDBMS	Requirements Database Management System
RDT&E	Research, Development, Test, and Evaluation
RIPT	Requirements Integrated Product Team
RRB	Requirements Review Board
RRP	Rapid Response Process
SAF	Secretary of the Air Force
SMART	Short Method to Acquire Ready or Replacement Technologies
SPD	System Program Director
SPECAT	Special Category Programs and Requirements
SPO	System Program Office
TEMP	Test Evaluation Master Plan
TMP	Technology Master Process
TPIPT	Technology Planning Integrated Product Team
TSRA	Training System Requirements Analysis
USAFE	United States Air Force—Europe
VCSAF	Vice Chief of Staff of the Air Force

Attachment 2

AFSOC REQUIREMENTS RELATED BOARDS

A2.1. AFSOC Requirements Review Board (RRB) Membership:

A2.1.1. Special Category (SPECAT) Programs and Requirements.

Chairperson - Director of Operations Plans and Tactics (HQ AFSOC/DOX).

Executive Secretaries - Chief of Contingency Force Management, Directorate of Contingency Operations (HQ AFSOC/DOS), and Chief of Requirements, Operations Directorate (HQ AFSOC/DOXR), or their designated representatives.

Members - The applicable HQ AFSOC director designates one primary (usually the division chief) and an alternate from:

HQ AFSOC/DOS	HQ AFSOC/SES	HQ AFSOC/FMB
HQ AFSOC/LGM	HQ AFSOC/XPQ	

Advisors - The applicable HQ AFSOC director designates one primary (usually the division chief) and an alternate from:

HQ AFSOC/FMC	HQ AFSOC/IN
	Rep
HQ AFSOC/XPP	720 STG/DO Rep

A2.1.1.1. Specific guidance on the handling of SPECAT programs and requirements can be found in USSOCOM Directive 70-2 Appendix K. This is a classified document – HQ AFSOC/DOXR and HQ AFSOC/DOS have copies and will make a determination regarding access to the information.

A2.1.2. Non-SPECAT Programs and Requirements:

Chairperson - Director of Operations Plans and Tactics (HQ AFSOC/DOX).

Executive Secretary - Chief of Operations Plans and Requirements, Directorate of Operations Plans and Tactics (HQ AFSOC/DOXR), or designated representative.

Members - The applicable HQ AFSOC director designates one primary (usually the division chief) and an alternate from:

HQ AFSOC/DOO	HQ AFSOC/XPQ	HQ AFSOC/DPX
HQ AFSOC/FMB	HQ AFSOC/INX	HQ AFSOC/LGM
HQ AFSOC/LGR	HQ AFSOC/SCP	HQ AFSOC/XPM
HQ AFSOC/XPP	720 STG/DO	

Advisors - The applicable HQ AFSOC director designates one primary (usually the division chief) and an alternate from:

HQ AFSOC/CEP	HQ AFSOC/DOOT	HQ AFSOC/DOOO
HQ AFSOC/DOS	HQ AFSOC/DPR	HQ AFSOC/FMC
HQ AFSOC/INA	HQ AFSOC/JAO	HQ AFSOC/LGX

HQ AFSOC/SCX	HQ	AFSOC/SE	720 STG/SG Rep
	Rep		
HQ AFSOC/SF Rep	HQ AFSOC/XPT	HQ AFSOC/XPPX	

A2.1.3. Attendance at RRB Meetings: Attendance is mandatory for members. If a member cannot attend, the designated alternate attends for the member. Attendance is limited to the briefer and those specified in paragraph

A2.1.2. Individuals may attend RRB meetings when specifically invited and their participation will enhance the RRB's understanding of the specific requirement or mission need under consideration. All comments made in the RRB are nonattributable to any individual to ensure a broad perspective divorced from functional advocacy.

A2.1.4. Responsibilities:

A2.1.4.1. The Chairperson (HQ AFSOC/DOX): Convenes and presides over the RRB. Provides policy and guidance for the RRB. Approves the agenda. Ensures the RRB's recommendations and formal dissents are presented to the Program Evaluation Group (PEG), Budget Review Group (BRG), and AFSOC Council when appropriate. Directs an alternate to chair the RRB in chairperson's absence (usually the Chief, Weapons and Tactics-DOXT). Assign actions to members and advisors, as appropriate. Convenes an executive session (members only) when appropriate.

A2.1.4.2. The Executive Secretary (HQ AFSOC/DOXR): Schedules briefings, prepares agendas, and monitors presentation requirements, as directed by the chairperson. Presents the RRB's recommendations and formal dissents to the PEG, BRG, and AFSOC Council when appropriate. Assists and advises individuals briefing the RRB, PEG, BRG, and AFSOC Council, as required. Maintains files and records of RRB meetings. Controls attendance at meetings. Furnishes members and advisors with an agenda, a list of requirements, briefing slides, and point papers to be reviewed, approved, and prioritized, as appropriate.

A2.1.4.3. The RRB members: Contribute their functional expertise to RRB meetings. Sponsor briefings and issues for RRB consideration, as required. Provide written rationale for specific disagreements with RRB recommendations through the executive secretary to the chairperson. Ensure their corresponding member of the AFSOC Council is aware of their dissents.

A2.1.4.4. The RRB advisors contribute their functional expertise to RRB meetings.

A2.1.4.5. The briefer or directorate OPR for each stated requirement: Prepares an RRB fact sheet and slide briefing. Ensures the presentation is properly coordinated across the HQ AFSOC staff. Provides copies of the briefing and RRB Fact Sheet to the chairperson and executive secretary for review and approval at least 5 working days prior to the RRB meeting. Identifies presentation support requirements to the executive secretary (e.g., overhead projection, etc).

A2.1.5. Procedures: The RRB generally convenes quarterly. The board reviews, and approves new and existing requirements. Existing requirements (already approved) are reviewed and combined with new requirements in order to develop a rank ordered prioritized list without regard to future budget considerations. This prioritized list is then coordinated through the directors and forwarded to the Command Section for approval. This prioritized list is forwarded to the AFSOC PEG for funding consideration. A separate list containing only special operations-peculiar, validated requirements is forwarded to USSOCOM/SORR-SR for consolidation into the USSOCOM Integrated Requirements

Priority List. For SPECAT programs, the board convenes as required. The RRB Executive Secretary distributes an agenda and a list of new or existing requirements to be reviewed, approved, or prioritized, prior to the RRB meeting. The Executive Secretary drafts and forwards minutes and recommendations to the chairperson for signature and distributes the minutes to appropriate AFSOC and USSOCOM agencies.

A2.2. AFSOC Council:

A2.2.1. Membership:

Chairperson - Vice Commander, AFSOC (AFSOC/CV)

Executive Secretary - The chairperson of the group or board (i.e. RRB, PEG, BRG, etc.) requiring the AFSOC Council.

Members - HQ AFSOC directors or their designated representatives (usually a division chief).

HQ AFSOC/FM	HQ AFSOC/DO	HQ AFSOC/IN
HQ AFSOC/SC	HQ AFSOC/LG	HQ AFSOC/DP
HQ AFSOC/XP	HQ AFSOC/CE	720 STG/CC

Advisors - The principal or designated representative from the following organizations:

HQ AFSOC/IG	HQ AFSOC/JA	HQ AFSOC/SE
HQ AFSOC/PA	HQ AFSOC/HO	HQ AFSOC/SG
HQ AFSOC/HC	HQ AFSOC/PKM	

A2.2.2. Attendance at Council Meetings:

A2.2.2.1. Attendance is mandatory for members. If a member cannot attend, the designated alternate attends for the member.

A2.2.2.2. Attendance is limited to briefer and those specified in paragraph A2.2.1. Members and advisors to the RRB, PEG, and BRG may attend AFSOC Council meetings when their participation will enhance the council's understanding of the specific area under consideration.

A2.2.2.3. All comments made in the AFSOC Council are non-attributable to any individual to ensure a broad perspective divorced from functional advocacy.

A2.2.3. Responsibilities:

A2.2.3.1. The Chairperson, AFSOC Vice Commander (AFSOC/CV), provides policy and guidance for the council. Directs an alternate to chair the council in the chairperson's absence. Assigns action to members and advisors, as appropriate. Ensures the council's recommendations and formal dissents are presented to the Commander. Calls for executive session (members only), when appropriate.

A2.2.3.2. The executive secretary schedules briefings, prepares agendas, and monitors presentation requirements, as directed by the chairperson. Assists and advises individuals briefing the council, as required. Maintains files and records of council activities. Controls attendance at meetings.

A2.2.3.3. The council members contribute their functional expertise to council proceedings and sponsor briefings and issues for AFSOC Council consideration, as required. Ensure the chairperson is aware of specific disagreements with council recommendations.

A2.2.3.4. The council advisors contribute their functional expertise to council proceedings.

A2.2.3.5. The briefer provides copies of the briefing to the chairperson and executive secretary prior to the council. Ensures the presentation is properly coordinated across HQ AFSOC and other appropriate staffs at the director level if the briefing was not approved by the RRB, PEG, or BRG. Identifies presentation support requirements to the executive secretary (e.g., overhead projection, etc.)

A2.2.4. Procedures:

A2.2.4.1. PPBS Actions. The AFSOC Council will normally review recommendations made by the PEG and BRG, as appropriate.

A2.2.4.2. Other. Specific procedures for handling other issues (such as Integrated Priority List development) are established by the chairperson as the situation requires.

A2.2.5. AFSOC Council Recommendations. The AFSOC Council chairperson (or the PEG, BRG chairperson, if directed) will brief all recommendations to the Commander for approval. The chairperson should ensure the Commander is aware of any council member's dissenting views.

A2.3. Configuration Review Board (CRB)

A2.3.1 Membership:

A2.3.1.1. **Chairperson** – Chief, Maintenance Engineering Division (HQ AFSOC/LGM).

A2.3.1.2. **Executive Secretary** – Chief, Programs and Analysis Branch (HQ AFSOC/LGMX) or their designated representative.

A2.3.1.3. **Members** – The applicable HQ AFSOC director designates one primary (usually the division chief) and an alternate from:

HQ AFSOC/DOT	HQ AFSOC/DOV	HQ AFSOC/DOX
HQ AFSOC/LGM	HQ AFSOC/SES	HQ AFSOC/XPQ

A2.3.1.4. **Advisors** – The applicable HQ AFSOC director designates one primary (usually the division chief) and an alternate from:

HQ AFSOC/FMB	HQ AFSOC/LGS	HQ AFSOC/LGR
HQ AFSOC/XPT	HQ AFSOC/XPP	HQ AFSOC/DOXR
HQ AFSOC/DOXT	18 FLTS	25 IS

A2.3.2. Attendance at Meetings. Attendance at CRB meetings is mandatory for members. If a member cannot attend, the designated alternate attends for the member. Attendance at CRB meetings is generally limited to those specified in paragraph A2.3.1.3., in addition to any individuals specifically invited to enhance the CRB's understanding of the specific requirement or mission need under consideration. All

comments made in the CRB are non-attributable to any individual to ensure a broad perspective divorced from functional advocacy.

A2.3.3. Responsibilities:

A2.3.3.1. The CRB will validate all AF Form 1067 modification proposals, aircraft and aircraft related modifications for assigned aircraft. For SOF aircraft assigned to the Air Education Training Command (AETC), LGMX will coordinate modification proposals through HQ AETC/LGM. For SOF aircraft assigned to Air National Guard Command (ANGC), LGMX will coordinate modification proposals through HQ ANGC/XP. For SOF aircraft assigned to Air Force Reserve Command (AFRC), LGMX will coordinate modification proposals through AFRC/LGM. HQ AFSOC/DOXR will coordinate all SOF peculiar modifications through United States Special Operations Command (USSOCOM) IAW AFSOC HOI 10-601 and USSOCOM Directive 70-2.

A2.3.3.2. XP plans and programs aircraft modifications and serves as AFSOC sponsor for new capability modifications and Command System manager for approved modifications. XP also provides the Weapons System Integrated Product Team (WSIPT) leader.

A2.3.3.3. The appropriate WSIPT will review all modifications pertaining to their weapon system. The purpose of forming a WSIPT is to review modifications and provide sufficient technical expertise to the appropriate WISPT leader so he/she can make informed decisions on modifications. The WSIPT leader has the final authority to recommend approval/disapproval to the CRB. As a minimum, the WSIPT should include weapon system experts from the following areas: DOX, LGM, SES, and XPQ.

A2.3.4 Procedures:

A2.3.4.1. Route AF Form 1067 modifications through LGMX for logging. LGMX will assign an AFSOC control number and pass to the appropriate WSIPT leader for review. LGM will be the OCR and continue to track the modification through execution.

A2.3.4.2. LGMX will schedule the CRB meeting, prepare an agenda, and notify participants. A copy of the AF Form 1067, Modification Proposal, will be attached to the agenda. Procedures for processing priority modifications are outlined in paragraph A2.3.8.

A2.3.4.3. Upon conclusion of the CRB, LGMX will publish minutes for distribution to AFSOC units, other commands and higher headquarters, as appropriate. The minutes will include: the MAJCOM control number, modification class, description, AFSOC WISPT leader and action taken (i.e. approved/disapproved).

A2.3.4.4. Disapproved modification proposals: The WSIPT will review the proposal and forward to the CRB with a synopsis of the WSIPT review including their rationale for recommended disapproval. If the CRB concurs, LGMX will return the documents, including rationale for disapproval, to the originator. LGMX will retain a file copy of the modification proposal. CRB disapproval constitutes closure of the document and any attached suggestions.

A2.3.4.5. Approved modification proposals. LGMX will send the signed documents to the SPD (System Program Director) single manager (SM) for review and approval. Permanent modifications not requiring USSOCOM coordination are forwarded for an engineering evaluation and budgetary cost information (BCI) only. The WISPT leader will work with DOXR for permanent modification proposals requiring

USSOCOM coordination. Permanent modifications do not receive SM approval until the program is fully funded.

A2.3.4.6. Temporary (T-1 & T-2) modifications are forwarded for engineering evaluation and approval. If the proposal comes back from the SM with significant engineering changes, LGMX will forward it to the WSIPT leader for review. The WSIPT leader will again present the modification to the CRB with a synopsis of the changes required.

A2.3.4.7. LGMX will return permanent modification packages receiving SPD engineering evaluation and BCI to the WSIPT leader. The WSIPT leader will take necessary actions to fund or withdraw modification proposal (due to lack of funding). The WSIPT leader will notify LGMX and appropriate SPD of funding status on a quarterly basis or when program is funded. If required, the WSIPT leader will prepare the Requirements Review Board (RRB) briefing and fact sheet for DOXR for inclusion in the RRB.

A2.3.4.8. LGMX will return temporary (T-1 & T-2) modification packages receiving SPD approval to the WSIPT, appropriate test organization, and/or initiator for their records and/or action. This package should include the AFMC Form 243 (Temporary Release for Flight Certificate) and AFMC Form 518 (Configuration Control Board Directive).

A2.3.4.9. Modification proposals submitted by outside agencies (such as lead commands) for AFSOC command certification will be processed through the WSIPT and CRB using the procedures in sections A2.3.4.1 – A2.3.4.8. LGMX will forward CRB results to the originating agency.

A2.3.5. Modification Classes

A2.3.5.1. T-1 Modifications. T-1 modifications are low risk/low cost modifications to provide increased capability for a special mission. The following guidelines apply to T-1 modifications IAW AFI 21-101:

A2.3.5.1.1. Materials must be obtained from Air Force stock with no additional procurement required to replenish supply.

A2.3.5.1.2. Aircraft must be able to be returned to their original configuration within 48 hours.

A2.3.5.1.3. Modified aircraft must not require additional logistics support such as technical data, engineering support, spares, support equipment etc.

A2.3.5.1.4. The SPD will not provide modification kits or issue a standard TCTO. All required instructions, procedures, parts lists, drawings, and schematics must be provided by the originating unit or the WSIPT leader.

A2.3.5.1.5. No more than 5 aircraft may be modified without concurrence from HQ AFSOC/LGM and approval from aircraft SM who must receive approval from HQ USAF/LGM.

A2.3.5.1.6. Temporary modifications are not a substitute for permanent modifications. They will not remain installed for more than one year without a waiver from the SPD single manager. The WSIPT will either process waiver paperwork for retention of temporary modifications beyond 12 months of installation, or resubmit the modification to the CRB as a permanent modification.

A2.3.5.1.7. In addition to the above AFI 21-101 guidelines, the following command guidelines also apply:

A2.3.5.1.7.1. The originating unit will track and maintain historical records for all installation/removal actions for each aircraft affected by the modification.

A2.3.5.1.7.2. A physical configuration inspection (PCI) will be accomplished for only the first installation unless the single manager specifically requests a PCI on each aircraft in extenuating circumstances. This inspection will be performed by a qualified individual not involved with the installation. The PCI will be documented on the AFMC Form 273 (Physical Configuration Inspection (PCI) Report).

A2.3.5.2. The OPR will prepare the AF Form 1067 for T-1 modifications as follows:

A2.3.5.2.1. Check "NO" for all entries on the AF Form 1067 block 13, ALSO AFFECTS:

A2.3.5.2.2. Include the following headings in the proposed solution, block 17:

A2.3.5.2.2.1. Application (including MDS and tail numbers (if known))

A2.3.5.2.2.2. When to be accomplished (including the scheduled removal date)

A2.3.5.2.2.3. What is Required (including a list of materials required)

A2.3.5.2.2.4. How work is accomplished (including all instructions, drawings, sketches or photographs required to install the modification)

A2.3.5.2.2.5. Supplemental Information. Including: all drawings, flight worthiness certificates for group B components, operating instructions, installation/maintenance and inspection procedures, training requirements, structures documentation (such as weight and balance, stress analysis, location, part number identification of fasteners), electrical documentation (such as power requirements, electrical load analysis, EMI/EMC impacts), aerodynamics documentation (such as drag, flow field impacts, thermal impacts), safety documentation (such as radiation hazards, human factors, and hazardous materials), test information (such as identification of the responsible test organization (RTO), concept of test, test schedule (T-2 only)).

A2.3.6. T-2 Modifications. T-2 modifications are for temporary testing of a system or component, usually according to a Program Management Directive (PMD). The testing organization will provide all required documentation and equipment. The following guidelines apply to T-2 modifications IAW AFI 21-101:

A2.3.6.1. Procurement of hardware must be made using one of the following sources:

A2.3.6.1.1. Research development, test and evaluation (RDT&E).

A2.3.6.1.2. Air Force stock inventory.

A2.3.6.1.3. Initial kits purchased from an acquisition program's production funds to do a trial installation.

A2.3.6.1.4. No more than 5 aircraft may be modified without the approval of the aircraft single manager.

A2.3.6.2. In addition to the above AFI 21-101 guidelines, the following command guidelines also apply:

A2.3.6.2.1. A certified RTO, will be assigned to each T-2 modification.

A2.3.6.2.2. The RTO will ensure the modification is removed and equipment is returned to its original configuration, or that the modification T-2 is revalidated within 180 days from completion of the test. Revalidation is accomplished for the following reasons:

A2.3.6.2.2.1. To preserve a portion of the modification for use with another test program.

A2.3.6.2.2.2. When portions of the modification cannot be removed without causing extensive damage or repair to the pre-modified configuration.

A2.3.6.2.3. The RTO will track and maintain historical records for installation/removal actions for each aircraft affected by modification.

A2.3.6.2.3.1. An AFMC Form 243 (Temporary Release for Flight Certificate) will be used to document installation/removal actions, which will include aircraft serial number and install/removal dates. Completed AFMC Form 243s will be forwarded to the aircraft single manager for configuration control purposes.

A2.3.6.2.4. The RTO will ensure a PCI is accomplished for each installation/removal action. The PCI will be accomplished by a qualified or SPD selected individual. The PCI will be documented on an AFMC Form 243.

A2.3.6.2.5. XPT will notify the applicable SPD, WISPT leader, and LGMX of the completion of all T-2 modifications generated by AF Forms 1067. This notification will constitute closure of the AF Form 1067.

A2.3.6.3. The OPR will prepare the AF Form 1067 for T-2 modifications using the guidelines in section A2.3.5.2 of this regulation.

A2.3.6.4. T-2 modifications for standardized instrumentation used by the 18 FLTS and Det 1, 46 OG are unique. Rather than repeatedly approve similar data collection combinations, 18 FLTS and Det 1, 46 OG will prepare annual comprehensive 1067 packages that identify the desired core instrumentation capability needed to support AFSOC and LU operational and developmental testing. These packages will request approval for a period of one year. This allows 18 FLTS and Det 1, 46 OG to operate within the 1067 prescribed bounds of mechanical, electrical, and equipment limits per MDS without having to seek test-by-test permission for different instrumentation combinations that do not exceed these limits.

A2.3.6.4.1 Significant deviations to the packages will require a Change Letter to the modification for either new equipment not previously approved or peculiar test configurations not addressed by these modification packages. The SM will determine if a Change Letter amendment is adequate or the change warrants a new 1067 package. The annual updates will then take into effect all of the changes made the previous year if desired as a core capability.

A2.3.6.4.2 The AFMC Form 243 will be forwarded from the SM with block 4 listed as "all". The 18 FLTS and Det 1, 46 OG will then conduct PCIs for their instrumentation installations on a per test basis. A knowledgeable individual who did not participate in the installation will conduct the PCI and then sign the AFMC Form 243. A copy of the form as well as written and visual documentation will be maintained in 18 FLTS and Det 1, 46 OG case files.

A2.3.7. Permanent Modifications. Permanent modifications may be for any of the following items: aircraft, support equipment, aircrew training devices, maintenance training devices or visual aids, technical data, spares, software, etc. In most cases the MAJCOM must develop Program Objective Memorandum (POM) initiatives for these modifications. Therefore, once a modification proposal is approved by the CRB, the WSIPT leader will prepare required documentation for the RRB and PEG. When the modification proposal is funded, the SPD will either generate a standard TCTO or do the modification under a Contractor Logistics Support (CLS) program.

A2.3.7.1. The originator or WSIPT will prepare the AF Form 1067 using the guidelines in section A2.3.5.2. The AF Form 1067, Block 13, Also Affects, will be marked "YES/NO" accordingly.

A2.3.7.2. The following guidelines apply to all permanent modifications utilizing an AF Form 1067:

A2.3.7.2.1. Air Force modifications projected to cost more than \$65M: These modifications require a MNS prepared by the WSIPT in addition to coordination and prioritization through the RRB and PEG.

A2.3.7.2.2. Air Force modifications projected to cost less than \$65M: Air Force modifications that are under the \$65M threshold do not require a MNS, but still must be coordinated and prioritized through the RRB and PEG.

A2.3.7.3. SOF peculiar permanent modifications must be submitted through DOXR using a MNS for coordination and prioritization through the RRB and PEG. MNS is then forwarded to USSOCOM for coordination and approval.

A2.3.8. Modification Response Time. The time required for AF Form 1067 engineering authority review by the SPD will be IAW the following standards:

<u>Priority</u>	<u>Response Time</u>	<u>Criteria</u>
Routine	30 days	Should be normal procedure
Priority	2 weeks	Short notice requirement. Must have an endorsement by a three letter organization at AFSOC, WR-ALC, or ASC.
Emergency	48 hours	Contingency operations, minor change to on-going test. Must have an endorsement by a two letter organization at AFSOC, ASC, or WR ALC.

A2.3.8.1. The WSIPT leader or designate will hand carry T-1 or T-2 proposals requiring immediate CRB approval to DOT, DOV, DOX, LGM, SES, and XPQ for review and signature. These agencies will sign the MAJCOM CRB coordination block on the AF Form 1067 with their concurrence or non-concurrence. Reason for non-concurrence will be documented in block 22 on the AF Form 1067.

A2.3.8.1.1. The WSIPT leader or designate will return the proposal to LGMX for the CRB chairman's signature and processing IAW paragraph A2.3.4.5.

A2.3.8.1.2. LGMX will FAX or overnight express priority and emergency modification packages to the appropriate agency for review and approval.

A2.3.8.1.3. Once engineering approval/disapproval is received, LGMX will immediately contact the WSIPT leader, designated alternate, or originator with the results.

A2.3.8.1.4. Normal T-1 and T-2 removal guidelines (A2.3.5 and A2.3.6, respectively) apply.

A2.3.9. Alternatives. Alternatives that may reduce the cost of a proposal should be considered. These may include changes to software, replacement of parts through attrition as preferred spares, and recommendations for improved practices

Attachment 3

MNS/ORD CHECKLISTS

MISSION NEED STATEMENT	Yes	No
1. Does the mission need statement clearly address the mission deficiencies which warrant pursuit of a materiel fix?		
2. Are these deficiencies linked to specific elements of a mission area analysis, mission needs assessment, and/or specific mission tasks/subtasks (such as strategic planning process core, essential, and supporting tasks)?		
3. Does the mission analysis portion of the mission needs statement address the specific nature of the deficiency relative to the accomplishment of those tasks/subtasks?		
4. Does the threat analysis section of the mission needs statement clearly define the threat in terms of the operational environment and impacts on the specific mission tasks that need to be accomplished by the system?		
5. Does the "mission need" section of the mission needs statement provide quantitative/qualitative measures of effectiveness (MOE) and measures of performance (MOP) to define the standards for effective execution of the specific mission tasks? This should include the measure and a definition of the "standard".		
6. Does the mission need statement list analysis sources used to evaluate non-materiel alternatives (e.g., mission assessment or other study)?		
7. Does the mission need statement contain specific information on all nonmateriel (doctrine, organization, tactics, operational concept, and training) alternatives examined and a brief description as to why these changes did not correct the mission deficiency?		
8. Does the mission need statement list all potential sources of materiel alternatives to meet this mission need (e.g., upgrade of existing systems, COTS/NDI options, systems under development by other services, allied R&D options, new starts, etc.)?		
9. Are system constraints identified (logistics, operational, etc.)?		

OPERATIONAL REQUIREMENTS DOCUMENT	Yes	No
GENERAL DESCRIPTION OF OPERATIONAL CAPABILITY.		
1. Does the ORD clearly describe the mission area, type of system proposed, anticipated operational and support concepts, and mission need/deficiencies which warrant a materiel solution?		
2. Is the mission need linked to specific elements of a mission area analysis, mission needs assessment, and/or specific mission tasks/subtasks (such as strategic planning process core, essential, and supporting tasks)?		
THREAT.		
3. Does this section of the operational requirements document clearly define the threat in terms of the operational environment and impacts on the specific mission tasks which need to be accomplished by the system?		
SHORTCOMINGS OF EXISTING SYSTEMS.		
4. Does this portion of the operational requirements document address the specific nature of the current system shortfalls/deficiencies (e.g., relative to the accomplishment of specific mission tasks/subtasks)?		
CAPABILITIES REQUIRED (AND SUBSECTIONS).		
5. Does this section of the operational requirements document clearly identify operational performance parameters (capabilities and characteristics) required?		
6. Is each capability and characteristic listed in operational, output oriented, and measurable terms?		
7. Is each capability and characteristic described in terms of a threshold value required to satisfy the mission need and an objective value?		
8. Are threshold values derived from mission analysis, analysis of alternatives, or widely accepted minimum standards needed to satisfy the mission need? (note: "military judgment" or project officer opinion is not acceptable criteria).		
9. Do objective values represent a measurable, beneficial increase in capability or operations and support above the threshold (minimum) value?		
10. Are elements of capability and performance listed in terms of quantitative/qualitative measures of effectiveness (MOE) and measures of performance (MOP) ?		
11. Do the performance parameters define the standards for effective execution of the specific mission tasks? This should include the measure and a definition of the "standard".		
SYSTEM PERFORMANCE.		
12. Does this section provide a detailed description of wartime and peacetime mission scenarios, to include mission profiles, employment tactics, countermeasures, and operational environment conditions?		
13. Are performance measures provided for all system performance parameters (e.g., range, accuracy, speed, payload, mission reliability, etc.)?		
14. Are key performance parameters (KPPs) recommended and do those parameters have measurable threshold values?		

OPERATIONAL REQUIREMENTS DOCUMENT	Yes	No
15. Is each key performance parameter (KPP): A. Essential for defining system or required capabilities? B. Is it warfighting oriented? C. Is it achievable/testable? D. Can the numbers/percentages be explained by analysis? E. If not met, are you willing to look at program cancellation?		
LOGISTICS AND READINESS.		
16. Are quantifiable measures used for mission capable rate, operational availability, frequency and duration of preventive or scheduled maintenance? Are they described in terms of mission requirements, considering wartime and peacetime logistics operations?		
17. Are combat support requirements identified, including battle damage repair capability, mobility requirements, expected manpower and skill levels, and surge and mobilization capabilities? AFI 10-602 provides specific guidance on defining these requirements.		
OTHER SYSTEM CHARACTERISTICS.		
18. Have applicable performance measures been identified for weapons effects, NBC survivability, electromagnetic effects, natural environmental factors, safety, security, survivability, and other applicable, unique system requirements been identified?		
19. Are measures of performance and effectiveness provided for each system performance characteristic and are those measures tied to specific mission tasks/subtasks that must be performed by the proposed system?		
20. Is the expected mission capability rate (e.g., full, percent degraded, etc.) provided for the various mission environmental conditions?		
PROGRAM SUPPORT (AND SUBSECTIONS).		
21. Does this section of the ORD fully establish the initial and full operational capability system support requirements?		
22. Does this section assign a joint potential designation (joint, joint interest, or independent)?		
23. Whenever possible, are performance requirements listed in terms of threshold and objective values and are these values measurable?		
MAINTENANCE PLANNING.		
24. Does the ORD clearly identify the maintenance tasks, maintenance approach (contractor, organic, or disposable) and phasing for all levels of maintenance?		
25. Are objectives established for the organizational, intermediate (if required), and depot levels for initial and full operational capability (AFI 10-602)?		
26. Are maintenance tasks identified for the accomplishment and time phasing of depot maintenance, to include programmed depot maintenance and surveillance inspections such as nuclear hardness and structural integrity?		
27. Has the planning approach for contract versus organic repair been described?		
28. Have Repair Level Analysis (RLA) trade studies been conducted to develop maintenance concepts?		
SUPPORT EQUIPMENT.		
29. Does the ORD address all standard support equipment and test/diagnostic/fault isolation equipment needed to support the proposed system?		

OPERATIONAL REQUIREMENTS DOCUMENT	Yes	No
30. Has standard support equipment to be used by the system been defined, maximizing the use of COTS/NDI and families of automated test equipment?		
31. Have test and fault isolation capabilities desired of automatic test equipment been described at all levels and expressed in terms of realistic and affordable probabilities and confidence levels?		
HUMAN SYSTEMS INTEGRATION.		
32. Are all human considerations for system operators and maintainers captured in the ORD? These include special training or skills required, mental abilities required, physical requirements, training devices/simulators, safety, and others.		
33. Has the operational and maintenance training concept (pipeline, training devices, embedded training and onboard training, interactive courseware) been briefly described?		
34. Have manpower, personnel, and training constraints been identified?		
35. Have objectives and thresholds, if applicable, for manpower (force structure and end strength), personnel (numerical and skill level), training, and safety been established?		
36. Have manpower and training methodologies to be used (i.e., HARDMAN) been specified?		
COMPUTER RESOURCES, LOGISTIC CONSIDERATIONS, C4I INTEGRATION, STANDARDIZATION, AND INTEROPERABILITY.		
37. Are all unique system requirements captured and listed as they apply to each area listed above?		
38. Have computer resource constraints (examples include language, computer, database, architecture, or interoperability constraints) been identified?		
39. Have mission critical and support computer resources, including automated test equipment been identified?		
40. Have the capabilities desired for integrated computer resources support been described?		
41. Have any unique user interface requirements, documentation needs, and special software certifications been identified?		
42. Has the provisioning strategy for the system been described?		
43. Have any unique facility and shelter requirements specified?		
44. Have special packaging, handling, and transportation considerations been identified?		
45. Have unique data requirements such as engineering data for depot support and technical orders for the system and depot been defined?		
46. Has any requirement for hazardous materials been identified and has the usage of these materials been minimized?		
47. Have Computer-aided Acquisition Logistics Support (CALS) requirements for technical data been included?		
TRANSPORTATION AND BASING.		
48. Are all deployment, mobility, basing requirements, training facilities, and similar considerations clearly defined?		
FORCE STRUCTURE.		
49. Does this section contain all necessary basis of issue plan (BOIP) data including number of systems needed (including spares and training) and units who will receive the proposed system?		
SCHEDULE CONSIDERATIONS.		
50. Is the schedule contained in this section viable? Does it define the number of systems,		

OPERATIONAL REQUIREMENTS DOCUMENT	Yes	No
personnel, facilities, maintenance and time elements to constitute initial operational capability (IOC) and full operational capability (FOC)?		
ANNEXES.		
31. Do ORD annexes, as needed, contain enough information to document performance requirements rationale, operational mode summaries/mission profiles, coordination, funding implications, training support, requirements correlation matrices, and other items as appropriate for the proposed system definition?		

Attachment 4

COVER SHEETS AND TRANSMITTAL LETTER

Figure A4.1. Example Cover Sheet for Draft Command Documents.

COVER SHEET FOR DRAFT COMMAND DOCUMENTS

Draft Documents

DATE:<<date>>*(Information on this page is used for example purposes only)*

DRAFT

Mission Need Statement

<<MNS, CRD, or ORD as appropriate>>

<<MAJCOM>> 001-9X

<<Command number>>

AIRLIFT WIDGET

<<Title of the MNS, CRD, or ORD as appropriate>>

ACAT X

<<ACAT I, II, or III>>

OPR: (Office Symbol)

Phone: (DSN & Comm.)

(Include Distribution Code, e.g. "Distribution C")

Figure A4.2. Example Cover Sheet for Final Command Documents.

COVER SHEET FOR FINAL COMMAND DOCUMENTS

Final Documents

<<date>>
<<*Date of Transmittal Letter*>>

<<*Information on this page is used for example purposes only*>>

FINAL
Mission Need Statement
<<*MNS, CRD, or ORD as appropriate*>>
<<*MAJCOM*>> 001-9X
<<*Command number*>>
AIRLIFT WIDGET
<<*Title of the MNS, CRD, or ORD as appropriate*>>

ACAT X
<<*ACAT I, II, or III*>>

<<*Final Approval Signature*>>

MAJCOM/CC or Equivalent (MAJCOM/CV if delegated by MAJCOM/CC)

<<*Co-Signature as appropriate*>>

MAJCOM/CC or Equivalent (or MAJCOM/CV if delegated by MAJCOM/CC)
(Additional signature block applies only if additional MAJCOMs are sponsoring the document)

OPR: (Office Symbol)
Phone: (DSN & Comm.)

(Include Distribution Code, e.g. "Distribution C")

Figure A4.3. Example Transmittal Letter to USSOCOM.

DATE

MEMORANDUM FOR USSOCOM/SORR-SR

FROM: AFSOC/CC

100 Bartley St, Cmd Ste
Hurlburt Fld FL 32544-5273

SUBJECT: Mission Need Statement (MNS) for a Special Tactics Tactical Recovery Vehicle

1. The subject MNS is validated and submitted for USSOCOM approval. This requirement is designated Joint Interest; a variant to the Marine Corps Light Strike Vehicle (LSV) is envisioned to be the best solution.
2. This requirement is SO-Peculiar because it applies only to Special Tactics operators providing emergency medical trauma on the battlefield.
3. This requirement is currently ranked #9 on the AFSOC Mission Enhancement SOF-Peculiar Requirements List.
4. We are requesting MFP-11/Air Force in-cycle funding.
5. Distribution Statement D – DOD and DOD contractors.
6. Maj Brolin, HQ AFSOC/DOXR, DSN 579-3292, is the point of contact.

CHARLES R. HOLLAND
Major General, USAF
Commander

Attachment:
Subject Document